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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,370	01/18/2002	Jeffrey Doubrava	50963	7001
21874	7590 02/26/2004		EXAMINER	
EDWARDS & ANGELL, LLP			ANDREWS, MELVYN J	
P.O. BOX 55874 BOSTON, MA 02205			ART UNIT	PAPER NUMBER
BOBTON, MI	V VLLUJ		1742	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			$\subseteq$			
		Application No.	Applicant(s)			
		10/051,370	DOUBRAVA ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Melvyn J. Andrews	1742			
Period fe	The MAILING DATE of this communication apports.  OF Reply	pears on the cover sheet with the c	orrespondence address			
A SH THE - Exte after - If th - If NO - Faili Any	MAILING DATE OF THIS COMMUNICATION.  In the provisions of time may be available under the provisions of 37 CFR 1.1 of SIX (6) MONTHS from the mailing date of this communication.  In the period for reply specified above is less than thirty (30) days, a reple of period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on					
,—	•	action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
5)⊠ 6)⊠ 7)□	Claim(s) <u>1-20</u> is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) <u>20</u> is/are allowed. Claim(s) <u>1-19</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.				
Applicat	ion Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>18 January 2002</u> is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	: a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).			
Priority (	under 35 U.S.C. § 119					
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
2) 🔲 Notic 3) 🔯 Infor	et(s)  te of References Cited (PTO-892)  te of Draftsperson's Patent Drawing Review (PTO-948)  mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  ter No(s)/Mail Date 092102.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weakly et al (US 6,267,871) in view of DeBoer et al (US 5,302,183). and Courduvelis

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(US Patent No.4,600,699). Weakly et al discloses a process for removing metals from aqueous solutions from the <u>plating industry</u> (col. 1, line 11) that contain **colloidal forms** of the metal comprising flowing the aqueous solution between two electrodes and flowing through a **filter** that is not in a high voltage field (col.18, lines 53 to 65) and further explains at (col.12, lines 26 to 32) that:

The metal, however, does not plate, but instead, is deposited as native metal, such as native gold, as a metalliferous sludge-like material. Once sufficient time has passed for the filters to become saturated with metal, the filters are back flushed and the sludge collected or the filters are replaced. The filters may be stripped using standard technology or sent to a refiner for further processing.

the filters may be of granulated carbon, activated carbon and resins ... or any other filter type designed to catch a particular **metal colloid** or ion.(Col.15, lines 36 to 42) but does not explicitly disclose the how the filters may be stripped by standard technology or sent to a refiner for further processing and does not explicitly disclose recovery of palladium-tin catalyst but these techniques are well known as evidenced by DeBoer et all which discloses the recovery of a precious metal from a non-aqueous effluent comprising contacting the effluent with a reduction agent, depositing the precious metal onto a carrier, such as carbonaceous combustible material, and separating the precious metal loaded carrier from the effluent and further comprises combusting the carbonaceous combustible carrier loaded with precious metal and reclaiming the precious metal from the combustion residue (col.8, lines 26 to 30) it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the DeBoer et al process including combustion to the Weakly et all product which may be activated carbon loaded with precious metal in order to recover the precious metal.

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Claims 8, 10, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weakly et al (US 6,267,871) in view of DeBoer et al (US 5,302,183) as applied to claim1 above, and further in view of Courduvelis (US Patent No.4,600,699). Weakly et al and DeBoer et al do not explicitly disclose the recovery of a palladium-tin alloy but Courduvelis discloses a method for the recovery of palladium-tin catalyst from an exhausted catalytic solution to recover palladium metal (col.1, line 64 to col.2, line 20) and (col.2, line 55 to col.3, line 2) it would be obvious to one of ordinary skill in the art to recover palladium and tin such as disclosed by Courduvelis by the Weakly et al and DeBoer et al the motivation being to recover palladium metal from a plating solution in which solids are filtered from the plating solution prior to being further treated by stripping and/or burning.

### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 16 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to

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20 of copending Application No. 10/301,075. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '370 method comprising steps of a) concentrating..., b) removing... c) collecting... and burning are suggested by the '075 method steps of a) concentrating..., b) incinerating... and c) retrieving...

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/301,367. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '370 process comprising a) concentrating..., b) removing and collecting is suggested by the '367 method comprising a) concentrating..., b) removing..., c) solubilizing ... and d) retrieving...

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 8 and 13 recites the limitation "the non-catalytic metal" There is insufficient antecedent basis for this limitation in the claims.

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### Allowable Subject Matter

Claim 20 is allowed.

The following is an examiner's statement of reasons for allowance: the patents to Weakly et al (US 6,267,871), DeBoer et al (US 5,302,183) and Courduvelis (US 4,600,699) do not disclose or suggest the claimed method of recovering palladium metal from a tin/palladium catalytic colloid by the sequence of steps of Claim 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvyn J. Andrews whose telephone number is (571)272-1239. The examiner can normally be reached on 8:00A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on (571)272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mja February 13, 2004